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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/487,583	01/19/2000	Dan S. Bloomberg	104324	3328

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EXAMINER
WU, JINGGE

ART UNIT	PAPER NUMBER
2623	6

DATE MAILED: 04/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/487,583	BLOOMBERG ET AL.	
	Examiner	Art Unit	
	Jingge Wu	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-59* is/are pending in the application.

4a) Of the above claim(s) *4-22,28,29,40-48 and 54-59* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-3,23,24,27,30,31 and 39* is/are rejected.

7)☐ Claim(s) *25,26,33-38 and 49-54* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *3* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Applicant's election with traverse of species III in paper No. 5 is acknowledged. Regarding to Applicant's argument in paper No. 5, Examiner believed that the species I-V are directed to different methods or processes of rendering images that constitute different invention. The examiner disagrees with Applicant's assertion that no serious burden, and indeed, it is not appropriate to have five different inventions in a patent and also, it is serious burden to the Examiner to prosecute five different applications in his mandatory time for prosecuting one case. Finally, Applicant does not have any support for his assertion of "no serous burden" for the Examiner. Accordingly, Claims 1-3, 23-27, 30-39, and 49-54 are now presented for prosecution. Claims 4-22, 28-29, 40-48, and 55-59 are withdrawn from consideration.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 23-24, 27, 30-31, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2247596 to Jozefowski in view of EP 0590923 to Smith (a reference of PTO 1449).

As to claim 1, Jozefowski discloses an image rendering method comprising:

an encoder (run-length coding) that encodes the image data to provide encoded image data including anti-aliased grayscale text or line art that includes an identification of boundary pixels and associated pixels values (Figs. 1B and 2B, page 3-4, 7, 19-21); and

a decoder that is coupled to the encoder and decodes the encoded imag data to provide decompressed data including anti-aliased text or line art data and renders the decompressed data (Figs. 1B and 2B, page 3-4, 7, 19-21).

Jozefowski does not explicitly mention the scanner that is well known in the art but may use an video camera (page 14).

Smith, in an analogous environment, discloses a scanner scans an image and produces image data (Fig. 5 element 50) and also encoding the anti-liased text in encoded data.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the scanner in the Jozefowski' system in order to easily create an input image to be manipulated.

As to claim 2, the combination and Jozefowski and Smith does not explicitly mention MRC image architecture.

Examiner takes Official Notice that this feature is notoriously well known in the art.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the MRC in the Jozefowski' system in order to process the image with mixed line art and graphic content.

As to claim 3, Jozefowski further discloses the memory coupled to the encoder and decoder and that stores encoded image data, the memory being coupled to the decoder (page 27).

As to claim 30, the claim is corresponding method claim to claim 1. The discussions are addressed with regard to claim 1.

As to claim 23, Jozefowski further discloses high resolution binary data is produced by super sampling (page 19-20) and separates the boundary pixels into interior and exterior pixels (Fig. 2c, page 5-7 and 20-22, note that in Fig. 2c sub-pixel with code 1 is exterior pixel and sub-pixel with code 4 is interior pixel).

As to claim 24, Jozefowski further discloses determining the a first global grayscale value (4) corresponding to the interior boundary pixels and second global grayscale value (1) corresponding to the exterior boundary pixels and storing the pixle data including the global values (Fig. 2c, page 5-7 and 20-22, note that in Fig. 2c sub-pixel with code 1 is exterior pixel and sub-pixel with code 4 is interior pixel and the values are stored for the decoding).

As to claim 27, Jozefowski further discloses the decoder renders the image using the interior and exterior pixel values and the high binary resolution data (Fig. 2c, page 5-7 and 20-22).

As to claim 31, Jozefowski further discloses individually derived values of grayscale boundary pixels using the high resolution data and storing the derived values of the boundary pixels (Fig. 2c, page 5-7 and 20-22), and other limitations are addressed with regard to claim 23.

As to claim 39, Jozefowski further discloses storing a full image mask corresponding to the scanned image data (Figs. 5A and 6A).

Allowable Subject Matter

4. Claims 25, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including **all of the limitations of the base claim and any intervening claims.**

Claim 26 depend from claim 25, and claims 34-38 and 49-54, depend from claim 32 are, therefore, objected.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6377273 to Lee et al, US 6486888 to Fushiki et al, and US 6421060 to Luken discloses methods for producing anti-aliased image.

Contact Information

6. Any inquiry concerning this communication or earlier communications should be directed to Jingge Wu whose telephone number is (703) 308-9588. He can normally be reached Monday through Thursday from 8:00 am to 5:30 pm. The examiner can be also reached on second alternate Fridays.

Any inquiry of a general nature or relating to the status of this application should be directed to TC customer service whose telephone number is (703) 306-0377.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amelia Au, can be reached at (703) 308-6604.

The Working Group Fax number is (703) 872-9314.

Jingge Wu

Primary Patent Examiner